

REMARKS

Claims 1-20 were pending and rejected. Claims 1-2, 6, 8-12, and 15-16 have been amended, and claims 4-5, 7, 14, and 17-20 have been cancelled, without prejudice to pursue the original claims in a related application. Claims 21-23 are new. Thus, after entry of this amendment, claims 1-3, 6, 8-13, 15-16, and 21-23 are currently pending. No new matter has been added.

Claims Rejections under 35 USC §112

In the Action, claims 1-20 were rejected under 35 USC §112, second paragraph, for indefinite subject matter. In response, present independent claims 1 and 11 have been amended to overcome the rejections under 35 USC §112. Therefore, reconsideration of claims 1 and 11, including any claims respectively dependent thereon, is respectfully requested with express withdrawal of the rejection under 35 USC §112.

Claims Rejections under 35 USC §103(a)

In the Action, claims 1-7, 11-14, and 17-20 were rejected under 35 USC §103(a) as unpatentable over Fukutoku (US 2001-0004253), claims 8-9 and 16 were rejected as unpatentable over Fukutoku in view of Clark (US 3,925,777), and claims 10 and 15 were rejected as unpatentable over Fukutoku in view of Baron (US 3,740,743).

In response, claims 4-5, 7, 14, and 17-20 have been cancelled, without prejudice to pursue the original claims in a related application, and therefore, any rejection of these claims is considered moot.

Moreover, in reference to the remaining claims, Applicant asserts that the cited prior art references, alone or in any combination, fail to disclose or even suggest each and every limitation of the remaining present claims.

For example, present independent claim 1, as amended, recites the following limitations:

wherein the signal controller changes an inversion type when dot blocks are repeated in a predetermined pattern, each dot block includes a predetermined number of successive pairs of adjacent two pixels in a row included in at least one color pixels among the first to third color pixels,

and a magnitude of difference in gray between two pixels in each pair is larger than a critical value in each dot block,

wherein the predetermined pattern includes a first dot block in a first row and a second dot block located in the same columns as the first dot block in a second row adjacent to the first row,

wherein the first dot block has the gray differences of a first sign, and the second dot block has the gray differences of a second sign being opposite to the first sign,

wherein the signal controller determines whether each block is the first dot block or the second dot block,

wherein the signal controller comprises:

a block counter for counting ordinal of each block among the blocks in a row; and

a line counter for counting ordinal of a row including the blocks.

In pgs. 3-4, the Action purports that the Fukutoku reference discloses these limitations. However, Applicant respectfully disagrees.

Fukutoku is explicitly directed to only two adjacent pixels, wherein the flicker detection process as taught by Fukutoku is based on only two adjacent pixels having a gradation difference value greater than a critical value.

In Fig. 12, Fukutoku explicitly discloses a flicker detection process based on two adjacent pixels having a gradation difference value greater than a critical value.

In par. 14, Fukutoku explicitly discloses, "a flicker-judging section (12) that detects the difference in gradation between the image data (RGB) supplied to picture elements of the same color of two pixels adjacent in a horizontal direction."

In par. 15, Fukutoku explicitly discloses, "flicker-judging section in which the difference in gradation between the image data of two pixels adjacent in a horizontal direction is detected by each picture element of the same color. According to Fukutoku, when the difference in gradation between the image data of picture elements of the same color of two pixels adjacent in the horizontal direction is large, the size relationship between the image data of the two pixels is examined, and when the same size relationship repeats in between the pixels in the horizontal direction, it is concluded that there is a fear of occurrence of a flicker.

In par. 91, Fukutoku explicitly discloses, “the gradation difference judging section 41 compares the image data for these two adjacent pixels with each other for respective colors and detects gradation differences (step S12a).”

In sharp contrast to Fukutoku, present independent claim 1, as amended, recites, “wherein the signal controller changes an inversion type when dot blocks are repeated in a predetermined pattern, each dot block includes a predetermined number of successive pairs of adjacent two pixels in a row included in at least one color pixels among the first to third color pixels, and a magnitude of difference in gray between two pixels in each pair is larger than a critical value in each dot block,” and, “wherein the predetermined pattern includes a first dot block in a first row and a second dot block located in the same columns as the first dot block in a second row adjacent to the first row,” and, “wherein the first dot block has the gray differences of a first sign, and the second dot block has the gray differences of a second sign being opposite to the first sign,” and, “wherein the signal controller determines whether each block is the first dot block or the second dot block,” and, “wherein the signal controller comprises: a block counter for counting ordinal of each block among the blocks in a row; and a line counter for counting ordinal of a row including the blocks.” Support for these limitations may be found throughout Applicant’s specification, e.g., Figs. 4-6 and pg. 7, line 17 to pg. 12, line 21.

In one aspect, referring to Fig. 4, the present specification discloses a method of changing an inversion type is adapted to calculate the number of adjacent pixels having the gray difference larger than the critical value P_{th} in a single block (S403-S406). When the number of adjacent pixels (e.g., the positive dot pixel value B_p or the negative dot pixel value B_n) reaches the first predetermined number (i.e., $N/2$; N is the number of pixels in a single block), the block is determined to be a positive dot block or a negative dot block (S411, S421, S431). These calculating and determining processes are repeated for every block in a single frame. S412 and S422 are selective processes. When the number of the positive or negative dot blocks is larger than the second predetermined number (i.e., 60 % of the total number of the blocks), it is determined that the frame has a flicker pattern (S443). Fukutoku fails to disclose or even suggest this.

Moreover, the ancillary Clark and Baron references fail to remedy the deficiencies of Fukutoku. For example, Clark is merely relied for purportedly disclosing a counter that counts clock signals, and Baron is merely relied for purportedly disclosing counting rows by utilizing synchronization signals as input into counters.

Therefore, since the cited Fukutoku reference fails to disclose or even suggest each and every limitation of present claim 1, and the ancillary Clark and Baron references fail to remedy the deficiencies of Fukutoku, present independent claim 1, as amended, and any dependent claims dependent thereon are considered to be in condition for allowance, and such allowance is respectively requested.

Moreover, present independent claim 11 has been amended in a similar manner as with present claim 1. Thus, this claim and any claims dependent thereon are considered to be in condition for allowance for at least the same reasons discussed above in reference to present claim 1, and such allowance is respectively requested.

New Claims

Claims 21-23 are new and are considered to be in condition for allowance for at least the reasons discussed above in reference to present claim 1, and such allowance is respectively requested.

CONCLUSION

For the foregoing reasons, Applicant respectfully submits that the pending claims are in condition for allowance. Reconsideration and withdrawal of the rejections are respectfully requested and a timely Notice of Allowance is solicited.

The director is authorized to charge any deficiency in fees, or credit any overpayment, to Deposit Account No. 50-5029. If there are any questions regarding any aspect of the application, please call the undersigned at (408) 331-1672.

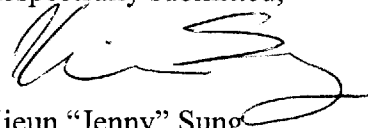
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Respectfully submitted,



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